

R E P O R T

OF THE

COMMISSIONER OF HEALTH,

KINGSTON, JAMAICA.

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M. DeCordova & Co., Printers, Harbour Street,



OFFICE OF COMMISSIONER OF HEALTH.

KINGSTON, 31ST DECEMBER, 1875.

SIR,

I have the honor to present to the Local Board of Health a Report on the sanitary state of the City of Kingston for the year ended 31st December instant, with remarks bearing upon various questions in connection therewith, accompanied by Returns shewing the nature and amount of the sanitary work effected during that time, under the direction and supervision of the Officers appointed by the Board.

2. In my last Annual Report of date 31st December, 1874, in consequence of an Epidemic of Small-pox and Measles having prevailed in the City, from the month of January to the middle of November, during which period a large number of deaths occurred among the inhabitants, more particularly from the former disease, which was of a malignant type, amounting as nearly as could be ascertained to 622 in number. I devoted much time to the task of giving full particulars in regard to the origin, progress, and spread of the disease.

3. Reference to the said Report will shew that, in view of the possibility of that or any other Epidemic diseases of a contagious or infectious character attacking the inhabitants, I deemed it my duty to make to the Board various suggestions, as to the sanitary precautions that should be taken in future to prevent their propagation, or to mitigate their force or severity in the event of any sudden or unexpected invasion.

4. Although Small-pox had lost its Epidemic character in the month of November, 1874, there were still a few scattered cases in the City until the 18th December, after which, only 4 cases were reported. When I wrote my last Report, the City was free of the disease, but there were two cases under treatment at the Small-pox Hospital. It was hoped and expected that no more cases would occur, it being concluded that the Zymotic influence, which had worked out its full measure of destruction throughout the year, was exhausted. But, on the 13th of January, a case of Small-pox was again reported in Luke Lane, the patient having been attended at home, and on the 2nd February, the Small-pox Hospital was re-opened for the reception of a patient.

5. The Return annexed marked A shews the number of patients that were under treatment in the Institution from the

month of February until July, 9 having been admitted therein, of which 3 died, from which time the City has been entirely free from Small-pox.

6. There were not more than 10 cases of Small-pox reported in the City between the months of January and July, in addition to those that were sent to the Small-pox Hospital. I am not acquainted with the history of those 10 cases, but it is necessary I should state that, of the latter, 6 had just come from other parishes where the disease was prevailing, and that it was not taken through any infection communicated in Kingston. There were evidently during the year no conditions, atmospheric or otherwise, favourable to the developement of Small-pox in the City. The cases referred to were in reality imported, and but for diminished susceptibility among the inhabitants, there might have been no further propagation and spread of the disease.

7. As far as I have been able to ascertain, the number of interments was 5, and these took place in the "Church of England Burial Ground."

8. It is not possible to determine if persons residing in an infected District, and who are apparently in health, are at any time under the influence of infection, caused by any prevailing disease of a contagious and infectious character, and therefore it becomes a matter of extreme difficulty to decide, at such periods, who may or may not with safety leave such a District and visit another where a similar contagious and infectious disease has not yet appeared.

9. The danger of such intercourse was clearly exemplified on two occasions last year at Port Royal, and has also been shewn in Kingston during the present year, when Small-pox appeared at the one place and reappeared at the other, at periods when they were regarded as thoroughly uninfected Districts. At unexpected moments, its presence was reported, through the immigration from localities, where the disease prevailed, of persons in whose constitutions the seeds of infection had been sown, only awaiting the period of incubation for its developement. The disease was so introduced into Port Royal from Kingston and St. Catherine, and into this City from the parishes of St. Andrew, Portland, St. Dorothy, St. Catherine and Manchester.

10. Great as is this evil, I see no mode by which it might be prevented, in so far as direct and ready intercommunication or free intercourse by land is concerned, but, in my last Report, I observed that with regard to coasting vessels, in consequence of what occurred more particularly at Montego Bay, Lucea, and Hope Bay, and I have reason to believe at other ports, it might

be proper for the Central Board of Health or Quarantine Board to consider if, under any existing Law, regulations could not be formed, and some restrictions placed upon this class of vessels, taking cargo or sailing in ballast from infected to uninfected ports, or entering such ports for any purpose whatever; and I then stated I was unprepared to offer any suggestions on the subject.

11. If at present, no power be vested in the above Boards, it might not be undesirable for the Government to pass a Law, enacting that every vessel, of whatever description, on being reported by the Health Officer of any port where she may arrive, as having sailed from a port in the Island where an infectious and contagious disease, like Small-pox is prevailing, shall be required to anchor at a certain distance from and to have no communication with the shore—if laden, to have her whole cargo fumigated before being discharged—and that the cabin and hold of the vessel should be subjected to the same process, being thoroughly cleansed, disinfected and limewashed. The crew not to be allowed to go ashore, but to be required by the Health Officer to remain on board for such a period of time as the Law may direct.

12. If such proceeding should be regarded as likely to cause an interruption to mercantile operations, I cannot but think that the question of the safety of the population is of paramount importance, considered relatively with that which concerns the interests of a few individuals, the utmost amount of injury, if any, done to whom might be, a slight interruption to business, through delay in the landing of goods.

13. Feeling satisfied, from experience, of the possibility of dangerous contagious and infectious diseases being thus brought from any of the distant parishes to Kingston, by means of vessels arriving from outports, I have thought it my duty to bring the matter again before the Board, seeing that this City, having a dense and increasing population, with dwellings, ill-constructed, badly ventilated, and overcrowded, is less prepared than any other place in the Island to withstand the consequences of an invasion of such diseases.

14. Whilst on the subject of contagious and infectious diseases, and referring to the measures that should be employed to guard the community from them, I would ask the attention of the Board to the remarks I made on the subject in a former Report, some of the suggestions contained in which might not be unworthy of the consideration of the Government, affording as I think they do, grounds for Legislative action, not the least

important of which I consider, to be those relating to the prompt and effectual isolation of the sick, on the appearance of any such dangerous diseases in the City

15. If the Board had been empowered, under any Law, to carry out the isolation or segregation of those persons, who were attacked with Small-pox in the month of January last year, it is not improbable that the disease would have been confined to them alone, and that its spread, as well as the fearful mortality that occurred, would have been prevented.

16. Under the provisions of Law 8 of 1874, the Board are authorized to direct the removal to the Small-pox Hospital of those persons only, suffering from contagious and infectious diseases, who are without proper lodging or accommodation, or lodged in a room occupied by more than one family, or being on board any ship or vessel, but they have no authority to isolate against his will, any individual so suffering at his own residence.

17. It may not be irrelevant to remark that this question of isolation, together with that of providing early information of new cases of infectious diseases, is engaging the attention of medical Officers of Health in Eng'land, many of whom, in their writings on sanitary subjects, have forcibly expressed their opinions thereon. From experience, they have felt convinced that isolation is the only effectual mode of preventing the spread of diseases like Small-pox and others of a contagious character, whenever a case appears in any locality.

18. It is not enough that, in any dwelling, the sick should be merely separated from the rest of the family and placed in a distant apartment. The peculiar instincts of our people, particularly of that class who regard it as their province to visit indiscriminately and afford aid to the sick, lead them without regard to consequences to attend the patient, and having free ingress and egress, infection is conveyed to places where fresh cases are reported, and sooner or later, there is a dissemination of the disease, such ill-judged display of good feeling and kindness leading to an increase of the evil, which it is so desirable to avoid. Nothing short of strict and forced isolation, carried out under the provisions of a Law enacted for such purpose, will avail to prevent a spread of contagious and infectious diseases.

19. I can only repeat, and it is my duty to impress the fact upon the Board, that if Small-pox, Cholera, or any other dangerous, contagious, and infectious disease should suddenly appear in the City, notwithstanding every effort that may have been previously made to carry out sanitary measures to their utmost ex-

tent, there will be no chance of escape by the community, unless the Board are authorized by Law to isolate, promptly and thoroughly, the first case or cases that may be reported.

20. With regard to Vaccination, as a means of protecting the population from the ravages of Small-pox, I have little to say in this Report on the subject, having dwelt upon it at considerable length in that of the 31st December last. I am aware that the Board are engaged in considering and devising the best means to be adopted for carrying out,—not only continuous but undoubtedly successful Vaccination, and that it is likely that necessary measures will shortly be taken for the accomplishment of what is so highly desirable.

21. If primary Vaccination has ever been as imperfectly performed in Kingston, as it is known to have been in some other parts of the Island, so that many individuals may be said to have been nominally Vaccinated, it will be of importance for the Board to impress upon the mind of the public Vaccinator the necessity of urging still more strongly Re-Vaccination, notwithstanding there had been Vaccination in infancy, so that there may be a certainty of protection, if exposed to the chances of infection.

22. I may here make a few remarks in regard to the Small-pox Hospital. Since the death of Doctor Somerville, no permanent appointment has been made by the Board of a Medical Officer to the Institution, the few cases that were afterwards admitted there having, at the instance of the Board, been attended by non-resident Medical Practitioners. The date of admission of the last case sent there, was the 23rd of July.

23. As a precautionary measure, it might be necessary for the Board, at once, to consider what arrangements should be made, to secure Medical Attendance for the future, both under the circumstance of an occasional admission of a patient, and of any crowding of the Wards, from the prevalence of an epidemic of any contagious or infectious disease.

24. I cannot close these remarks about the Small-pox Hospital, without observing that Doctor Somerville, who died on the 19th May, was, from his knowledge and experience, a most invaluable Officer of the Institution, and his loss was doubtless as much regretted by the Board as by the Profession. He had arduous and unpleasant duties to perform, and although on a few occasions he suffered in health, so as to render a short rest necessary, as a rule, he was indefatigable in his attendance on the patients.

25. I may be permitted to add that, as a Medical Man,

Doctor Somerville possessed a high sense of honor, and always shewed an unswerving regard for truth, which gave either to his professional statements or to his Official Reports and Returns that stamp of reliability, so characteristic of a high and honorable mind.

26. In the Town of Port Royal, there were three cases of Small-pox during the year, and Doctor Altman, the Health Officer under whose care they were, has furnished me with a statement, shewing the dates of their admission into the temporary Small-pox Hospital, and the results of treatment. They were sent there by Doctor Altman respectively on the 16th of April, and on the 15th and 18th May. All of them recovered, and on the 21st June, the Hospital, as well as the Town, was free of the disease, and has continued so to the present time.

27. There is no evidence of the fact, but, as Small-pox was prevailing almost epidemically in the Parish of St. Catherine during those months, it is not improbable that, from the free intercourse that existed and still exists between the two places, the disease was imported into Port Royal. The inhabitants were evidently as insusceptible of Small-pox infection, as they were in 1874, and therefore there was fortunately no propagation of the disease among them in the Town.

28. The Wakes' Law 27 of 1873 is still in force in the City and Parish of Kingston, but no Wakes have been reported by the Constabulary as having been held from the commencement of the year. The legal proceedings that were taken in 1874, against those who had infringed the Law, have evidently had a deterring effect.

29. It came to my knowledge, however, on the 5th November, that a Wake was held in Oxford Street on the night of the 7th October, and that proceedings having been taken in the Police Court against the parties concerned, and the case heard before the Police Magistrate on the 4th November, it was dismissed through insufficient evidence given by the Constables.

30. The fact of the holding of a Wake, of which the Constables were cognizant, not having been communicated to me by any of their Officers, led me to address a letter, of date 5th November, to the Inspector of the Force, requesting an explanation, which was at once afforded, viz : that he was not aware of the Rule with regard to the holding of Wakes, which had been laid down in 1874 for the guidance of his predecessor, by the Inspector-General of Constabulary.

31. I have now to bring to the notice of the Board the Re-

turn marked B, showing, in the form of a Summary, the work performed in carrying out Sanitary operations, under the direction and supervision of the Inspectors of Nuisances, from the 1st January to date.

32. It will be observed that 16,041 loads of refuse matter, the sweepings of the Streets and Lanes and of the yards of private dwellings, have been conveyed by means of carts to the place of deposit. The accumulation of dirt in these places is very great, and so rapidly does it collect in certain Streets that, notwithstanding they are regularly swept, they present the appearance almost daily as though no refuse matter had been removed from them. This is the case particularly in the Cross-streets in the lower part of the City—along Tower Street, Barry Street, Water Lane, and other Streets running from East to West. The houses in these streets, where there is a considerable amount of traffic daily, are densely populated, and the majority of them are occupied by persons (many of them foreigners) carrying on some description of shop-keeping business, from which places much dirt and refuse matter are constantly thrown—a practice which it has been most difficult to check, inasmuch as it has been impossible to have Officers stationed at all times along those streets watching for offenders. The Constables render no aid—in fact, they do not seem yet to know what is meant by Sanitary Laws, or the carrying out of Sanitary measures.

33. I consider that the quantity of refuse matter, chiefly animal and vegetable in a state of decay and rottenness, carted during the year to the place of deposit, has been very considerable, and it may reasonably be conceded that in proportion to the removal of so much of what is calculated to pollute the air of the City, has its sanitary condition been favourably influenced.

34. I have to observe, as in former Reports, that such refuse matter was taken from the City, and does not include that removed from the Streets and Yards of Houses in the Villages, viz: Alman Town, Fletcher's Land, Hannah's Town, Smith's Village, Brown's Town and Ray's Town. By means of hand-carts, the sweepings are removed daily from these places, but it is impossible to state with any degree of accuracy, what has been the total quantity removed during the year.

35. With reference to the place of deposit, it is to be feared that ere long, there will be no room for receiving dirt and rubbish, as the space for their reception is now becoming very limited—it is incalculable the number of cart-loads of rubbish, principally stable manure, from all parts of the City, that are thrown there daily.

36. If it be regarded as impracticable to carry out the suggestion I made in my Report of the 11th December, 1873, of having a Kiln erected at the extreme West of the Dung Hill, in which all refuse matter should be disposed of by burning, I would ask the board to consider the propriety of procuring an additional place on the Long Road, which I have inspected, immediately to the westward of the present place of deposit, which I understand was used formerly by direction of the City authorities for such purpose, and where dirt and rubbish might be again deposited. A great advantage to result from such a step would be the depositing of night-soil at a still further distance from the City. If the place in question could even be obtained for receiving this soil, much would be gained in a sanitary point of view. The earth-closet system having been adopted in some of the Government Institutions and in other public places, and the removal of soil being carried on nightly from them, it becomes still more desirable that such a place should be procured (although I am strongly of opinion that the land belongs to the City) and that the one now in use should be closed against such deposits.

37. A considerable number of Latrines have been emptied during the year, and it is believed that, at no former period, has such a number been attended to within the same time. This is due in a great measure to the active exertions of the Inspectors of Nuisances, who have been indefatigable in their efforts to have nuisances of the kind abated.

38. From the 1st January to date, 757 Latrines have been emptied, and their contents taken to the place of deposit—of these—558 were cleaned through written notices and orders served on householders, or on the owners or agents of premises; 60 through verbal notices given, and 139 were emptied by individuals, who voluntarily abated the nuisance, from sanitary considerations.

39. Under the Bye-Laws made in accordance with the 14th section of Law 6 of 1867, there was no provision for prohibiting the burying of night soil in private yards, and this defect in the Law was brought to the notice of the Board. At the instance of the Board, the 9th section was introduced into Law 8 of 1874, giving them power to frame such Bye-Laws as would meet the difficulty—they were accordingly framed, and having obtained the sanction of the Governor, came into operation. Under these Bye-Laws, the practice of burying night-soil in private yards is prohibited, and the proper place for such deposits, as well as the mode of burial, is directed. So that the dangerous and insani-

tary practice of digging pits in yards is altogether discontinued, to the benefit of the health of the community.

40. Cesspools in the streets and lanes continue to be a public nuisance, and notwithstanding the vigilance of the Inspectors, and their endeavours to have them kept empty and clean, they are constant sources of atmospheric vitiation, and consequently of injury to the public health—20 were cleaned during the year, 16 of them through written notices served on householders by the Inspectors of Nuisances, and the remainder without such notices—besides these, 8 were filled and abandoned.

41. Inasmuch as these pest-holes were constructed under the force of Bye-Laws—framed by a former Local Board of Health, it is not unreasonable to suppose that the present Board may, if they think proper, take steps to have them annulled, and afterwards adopt necessary measures to have all the Cesspools filled and abolished.

42. The Cesspool system was, some years ago, properly condemned in one of the public institutions of the City, on account of its alleged operation on the health of the inmates, and its probable influence upon the death-rate, and it was accordingly abandoned. It is certainly extraordinary that a Sanitary Board should, since that time, have sanctioned the construction of Cesspools, and framed Bye-laws such as have been referred to, under which householders are privileged to have them in their yards or in the streets and lanes immediately adjacent to their dwellings. To what extent the death-rate in the City has been increased by noxious and poisonous emanations from cess-pools and from the earth around them, saturated with foul and offensive water, it is difficult to say; but there can be no doubt it would be a great and important Sanitary movement to have all of them, whether situated in private yards, Streets or Lanes, speedily abolished. With this view, I ask the Board to bring these cesspools and their injury to the public health under their early and serious consideration.

43. Every effort has been made to diminish the large quantity of vegetation on the several unenclosed lots of land in the City—64 of these having been cleared of bush as well as dirt and rubbish, under the direction and supervision of the Inspectors of Nuisances, whilst some others have been cleaned by their owners, a considerable number remaining as standing nuisances throughout the City. At certain periods of the year, particularly after rains and when there is much decayed and decomposed matter on them, they are very likely to be sources of injury to the public health. Still greater efforts must be made and more active and decisive measures taken to have them, both enclosed, and unenclosed lots cleared of all such vegetation.

44. Whilst on this subject, I must again make some remarks on the condition of the Burial Grounds, which, almost without exception, abound with rank vegetation, of which they should be cleared.

45. Under the provisions of the Kingston Cemetery Act, 1874, so soon as under the authority of the Governor, burials in those grounds and in Church-yards are discontinued, it will devolve upon the Municipal Board to maintain such Church-yards or Burial Grounds in decent order, and also to do all the necessary repairs of the walls and other fences thereof. As the Governor can only be moved in this matter by the Central Board of Health, who for the protection of the public health may, under the provisions of the 24th Section of Law 6 of 1867, and of the 30th Section of the Cemetery Act, 1874, recommend to His Excellency the discontinuance of such burial places, it is to be hoped that a knowledge of the fact of their being in a condition, highly prejudicial to the health of the inhabitants, may induce that Board early to make such recommendation.

46. I have reason to believe that the Municipal Board are about to take active steps with regard to the Cemetery, where I learn that nearly 300 interments have taken place from the latter part of the year 1874, so that no doubt at an early period, intramural burials will be discontinued. This is most desirable, as it is well known that the Grave Yards in the City are in an alarmingly overcrowded state, and that they have been so for some time past, rendering interments not only difficult but dangerous. These are further facts, which should also not be unknown to the Central Board of Health.

47. The Slaughter Houses of the City have been regularly inspected, and there has been no cause for complaint as to the state in which they have been kept—manifestly, every regard has been had for cleanliness, although on Sanitary grounds, their situation eastward must be condemned. The public Slaughter-house I understand, is nearly completed, and it is not improbable that in the course of a few weeks, it will be opened for the slaughtering of animals. Its establishment, which will sooner or later determine the abandonment of private Slaughter-houses, will tend materially to add to other Sanitary improvements that are going on gradually, but perceptibly, in the city. It will be a great object, when the slaughtering of animals is being conducted, to keep the Slaughter-house in the most cleanly condition possible, for which purpose, the water supply should be adequate. If so kept, it will afford some evidence of careful management.

48. It is necessary I should make some observations about

the Markets. With regard to the Victoria Market, I cannot state that the drains are, at all times, in a satisfactory state—whether arising from their peculiar construction, or from want of a sufficient volume of water for flushing purposes—and I am inclined to attribute the evil complained of to the latter cause—a certain amount of unpleasant odour is sometimes experienced, of which complaints have been made.

49. Considering the nature of the fluids, and material substances, animal and vegetable, that are thrown into and washed along these drains, it may be expected that some allowance for such occasional smell should be made, but I am of opinion, that if a great force of water were used along them, such as I should imagine was contemplated when they were constructed, and they were kept constantly and thoroughly flushed, the odour would not be perceptible. I think the Commissioners of the Markets might be requested to give some consideration to these drains, with a view to the abatement of what the public may be disposed to regard as a nuisance. It is probable that if an enquiry be instituted, the Commissioners will find that there is a defective water supply. With regard to the manner in which the Market is kept, and the degree of cleanliness observed generally, I cannot do otherwise than write most approvingly.

50. Whilst on the subject of the Markets, I have to request the particular attention of the Board to what cannot but be regarded as an invasion and utter disregard of the Market Laws and City Regulations. On almost every day of the week, but especially on Saturdays, persons, chiefly females, are seen assembled and sitting in certain Streets and Lanes, vending provisions, fruit, etc., which are taken from their baskets and laid out thereon, thus establishing regular market places, and this is particularly the case in Orange Street, and East-Queen Street, in the immediate vicinity of the Sollas Market. Persons, so vending, are not interfered with by the Constabulary, nor am I aware, seeing that the practice goes on from week to week, that they are disturbed by any officers acting under authority, given by the Market Commissioners. The evils resulting therefrom are too evident—not only must the market fees, payable under the Market Laws be seriously reduced in amount weekly, but the sanitary condition of the City is greatly affected by the large quantity of garbage and other descriptions of filth and rubbish left in the Streets. Such collections give an uncleanly appearance to the Streets and Lanes, and convey an idea that they are never swept, and the sweepings never removed, whereas, with regard to the particular Streets mentioned, it would, on enquiry,

be ascertained, that the sweeping of refuse matter and its removal in carts had been carried on only on the previous day. The same may be said of streets and lanes in other parts of the City, where the practice has not escaped my observation, but it is plain that, without the intervention of the Constabulary and of the Officers acting under the Market Laws, it must continue, and by degrees, these small market places may acquire such proportions and be so thoroughly established as to make it a matter of difficulty to suppress them. The public, looking at the condition of such streets, labour under the impression that, whilst a large amount of money is being expended for sanitary purposes, as regards such streets, no proof is afforded of its judicious expenditure.

51. The fruit trade between this City and New York, which is evidently increasing, has determined another public nuisance, in order to prevent and abate which, the Officers have been compelled to give much of their time. At stated periods, a considerable number of cart loads of fruit are brought to the city for exportation, the present depôts for purchasing or receiving and storing such fruit being Lower Princess Street, Lower Temple Lane near the Victoria Market, Harbour Street, Lower Church Street, and Little Port Royal Street. The carts being arranged in a line along a Street or Lane, and having been unloaded, it is left in a disgracefully filthy state, from the quantity of trash, damaged fruit, grass or other rubbish thrown from such carts. On certain occasions, the Inspectors of Nuisances have been engaged the greater part of a day, watching the cartmen, and endeavoring to prevent them from leaving refuse matter in the streets. The Constables have sometimes rendered aid, but whilst on their beat, it can scarcely be expected that they will give their whole time to the special duty of watching these men, and seeing that they take away all rubbish in their carts.

52. Under a specially framed City Regulation, something might be done to facilitate the movements of the Officers of the Board, in their endeavors to prevent this nuisance. It should be made imperative upon all persons in the city, purchasing or receiving such fruit, to see that the trash deposited in the streets, during the unloading of carts, is removed by the cartmen, and they should be held responsible for the proper cleaning of such streets. Unless this be done, the Board may be required to appoint somebody specially to watch these carts, whose duty it would be to see that all trash and other rubbish are removed by the cartmen, and that the street is left by them in a perfectly clean state.

53. Every source from which foul emanations may arise, and in consequence of which the public health may be affected, is kept constantly in view; accordingly, in addition to slaughter-houses and market-places, all stable-yards, bakeries and certain manufactories, are inspected regularly, and it is satisfactory to state that, as a rule, such places are found generally clean and in decent order. The Inspectors have found it necessary to visit stable-yards somewhat frequently, as in them manure and other refuse matter are sometimes allowed to accumulate, but verbal notices have been sufficient for their removal. Similar notices have occasionally been given for the removal of stable-manure from the premises of householders, on which horses are kept.

54. Under the provisions of the 8th Section of Law 8 of 1874, the Board are required to provide a proper place for the reception of dead bodies, for and during the time required to conduct any post-mortem examination, ordered by the Coroner or other constituted authority.

It is scarcely necessary to state that whilst the Board have felt anxious to carry out the requirements of the Law, much difficulty has been experienced in procuring a place for such purpose. Having myself, at the instance of the Board, used some exertions, but failed to discover a proper place, it will be evident why there has been delay in carrying out the Law. I think I may state, however, that it is now considered that a spot at the north-western corner of the Gas Works is an eligible one for the erection of a Mortuary House. The distance may be objected to, but there really does not seem to be any other site favorable at the western part of the city. A difficulty may arise in regard to the water-supply; but, no doubt, the matter will be well considered, before commencing any building operations.

55. In my last report to the Board, I deemed it necessary to enter somewhat fully into the state of the streets and lanes of the city, and I was led to do so in consequence of the condition in which they were, being in some instances, from original construction, and, in others, from a state of disrepair, ill-adapted to allow of the free escape of surface waters, whilst they were favorable to formations of mud, collections of stagnant water, contamination of the atmosphere, and, consequently, to disturbance of the public health.

56. In the city of Kingston, as I have before stated, it cannot be said that the thoroughfares are in a state favorable to sanitary advancement. Whatever difficulties may operate against the construction and reconstruction or efficient repairing of several of them, I must adhere to the remarks I made in my

last Report, and, indeed, may venture to say that they are, generally, in a worse condition than they were at the period it was written.

57. In almost every street running from north to south, such are the irregularities of their surfaces, and so imperfect are the water-tables, many of them being above the level of the streets, whilst these, from their concavity, have been converted into large superficial drains, that after rains, water collects, forming so many stagnant pools. The cross-streets are in a worse condition—they are remarkable for the soft material of which they are made or with which they are repaired, for their want of convexity, the absence of water tables, the impossibility of water running off after showers of rain—also, for accumulations of mud and collections of stagnant water, all contributing to cause pollution of the air and injury to health.

58. I believe that apart from a question of comfort to pedestrians, there is a close connection between well-constructed and properly-drained streets, kept in a state of proper maintenance and cleanliness, and a sound state of health of the population—and that, where those essentials are wanting, sanitary progress will, with certainty, be materially impeded.

59. In the consideration of the question of the construction, reconstruction or repairs of the streets and lanes of Kingston, having regard to the existing mode of disposing of all waste waters, is necessarily involved that of the establishment of efficient drainage.

60. Daily experience shews that, under existing arrangements, even making allowance for conditions of disrepair of the streets and lanes, it is impossible, for various reasons, for storm and waste waters to run off them, and to pass down freely to the Harbour.

61. In determining the method to be employed to allow of the free escape of storm waters, and to dispose of all waste water from dwellings, it must be left for scientific men to decide whether or not it be practicable to accomplish this by means of superficial drains, constituting a system of surface drainage, or if an underground Sewage system, such as I understand has been suggested, should be adopted in Kingston; and on this subject, it may not be deemed presumptuous on my part, if I venture to make a few remarks.

62. As Commissioner of Health, seeing that the greatest sanitary defect of Kingston is its imperfect drainage, and convinced of the utter inadequacy of the means afforded for carrying off all waste waters, I have thought over the subject, and considered the

advantages or disadvantages likely to result, comparatively, from the adoption of an under-ground Sewage system, and of one of ordinary surface drainage.

63. With reference to the Sewage system, looking at the mode of construction of the Latrines throughout the city, for it is to be presumed that excretal matter with all the waste water of dwellings must be conveyed along the sewers, considering the degree of declivity of the streets and lanes, particularly at the lower part of the city, their termination almost on a level with the sea along the whole extent of the Harbour, where, of necessity, the outfalls must be below such level, and the Sewage matter must be driven back into the main pipes, seeing the consequences that would inevitably result to the health of the community, if such foul matter were deposited along the beach, with the prevailing wind blowing from the South-East, it does seem very problematical to the mind of a non-scientific person, if such an underground Sewage-system could be carried out with success, and with safety to the health of the citizens. And I imagine that, for the same reasons, a similar difficulty would be experienced, if the drain-pipes were similarly laid down for the purpose of carrying off merely storm and refuse waters.

64. It may be advanced that, with engineering skill and a vast expenditure of money, it would be practicable to lay down and direct the main sewers westward, where at the outfalls, the Sewage matter would be received into pits and (forgetting the large quantity of rich manure lying unnoticed at the place of deposit) be utilized for agricultural purposes, or the pipes having been laid down far westward, they may then be directed with more safety towards the Harbour, where, if not below the level of the water, the sewage matter would escape. But a cursory view of the cross-streets, as regards their degree of declivity from East to West, makes it very questionable if a sufficient fall could be obtained, and if Sewage-matter, even in a semifluid state, would pass along the Sewers to its destination, aided by a strong water-force. It is clear that, if the declination of the pipes be inadequate, a very costly flushing will be necessary, and even then, the heavier matters would be deposited, and so cause an obstruction, with all its attendant evils.

65. The attempt that was made, about the year 1863 or 1864 to lay down Sewage pipes from the Public Hospital to the Sea, cannot be forgotten—they were laid down along West Street to within a few yards of the sea shore, when it was found that the gradient was such at the lower part of the city, as to render the scheme impracticable. Upon representation made by the authorities, the Government ordered all the pipes to be taken up, and

afterwards directed the construction of a barrel drain from the Hospital along Rose Lane to the Brick-yard pits, about three or four chains South of the Spanish Town Road, where there is the outfall for Sewage-matter.

66. Irrespective of these facts, and simply taking a common-sense view of the matter, my impression is that the underground Sewagesystem of drainage, whether for the conveyance of excremental matter mixed with waste waters, or of the latter only with storm waters, will be found utterly impracticable; at the same time, I believe that necessary steps having been taken to place the streets and lanes, with their water-tables in a condition favorable for carrying out efficient surface drainage, this alone must be depended upon for the removal of waste and storm-waters. I shall, hereafter, suggest in what manner the flow of water might be made to increase along the water-tables, and these to be kept clean at all times.

67. There is an important matter to be considered in connexion with this question of drainage, and it is one shewing the desirability of at once placing the streets and water courses in a condition for carrying on surface-drainage more efficiently. The city has now an abundant supply of water from the Government Water Works, and for several months past an extraordinary quantity has been allowed to flow from yards at almost all hours day and night, and to run into the streets and lanes, forming pools, and becoming, at various places, stagnant and offensive. This has occurred to such an extent, as to have become a nuisance, for the abatement of which, much of the time of the Inspectors of nuisances has been employed.

68. The supply of water seems to be continuous—the facility with which it is obtained and the large quantity for drinking, domestic and general purposes have, in very many instances, led positively to waste. Bathing (almost every householder having a stone or wooden Bath) is now more resorted to than formerly, and in some houses, it has been ascertained that Baths are filled three or four times daily, the Waste Water being as frequently emptied into the streets and lanes. Then, as a rule, the yards attached to the great majority of houses are small, without space for carrying on gardening operations—the consequence is, there is no mode of utilizing the Bath water, and of necessity, it is allowed to run into the streets and lanes.

69. It is supposed that the quantity of soap water thrown into the Streets adds materially to that of Bath Water, allowed to run from premises into them, but the quantity is not considerable, and flows to no extent along the Water Tables— it is most commonly dashed into the middle of the Streets. On ac

count of the offensiveness of this water, endeavours are made to check the practice—it is not so much indulged in as formerly, and some offenders have been proceeded against in the Police Court, and convicted of the offence.

70. It has been stated that in the original design for the reconstruction of the Streets of Kingston, with paved water tables at their sides, these were made solely for the purpose of conveying storm waters down to the sea. But it seems to me a matter of urgency that, until it be decided that surface drainage for general purposes must be abandoned for some other more approved system, the Water Tables should be reconstructed in some places and repaired in others, in order that water from whatever sources, not foul or offensive, might be allowed to run off more quickly than at present.

71. Any ordinary observer must perceive that, apart from the peculiar mode of construction of the Water Tables, at the lower part of the City more especially, the fall is insufficient as before shewn, to allow water to run along them with any degree of swiftness, on which account there are stagnant and offensive collections. But, if properly constructed, of sufficient width, with a greater degree of concavity, their surfaces made comparatively smooth, regular, and free of holes, and altogether adapted for carrying off surface waters, I see no reason why, by a process of flushing, aided simultaneously by persons, at stated distances, sweeping along them with strong brooms, the drains could not be kept clean and free of all noxious matter. If this plan could be adopted and were systematically carried out, under similar regulations to those laid down for the sweeping of streets, the evil complained of, which is acquiring such magnitude, would be altogether overcome, and a great nuisance would be guarded against and prevented, with benefit to the health and comfort of the community. But I repeat that success would depend entirely upon the character of the water-tables, their degree of declivity, and the quantity of water allowed for flushing them.

72. This process would of course be confined entirely to the paved water-tables, as it would be quite inapplicable to those portions of the streets which are unpaved, and along which waste water should not be allowed to run.

73. It may be recollected that some time ago, my views on this subject were mentioned, and in support of them, I take the liberty of submitting, for the consideration of the Board, an extract from an article in a publication, entitled "Public Health" on the "Cleansing of Streets." The writer, who is Vice-President of the Sanitary Inspector's Association for Scotland, ———

Superintendent of Police, Perth, observes, "You will no doubt have frequently observed how clean and fresh our streets are after a heavy fall of rain. Does not that fact suggest to us that we might bring about the same result by artificial means, seeing we have command of the same cleansing element? It is now a good number of years since my attention was called to the practicability of cleansing our streets by the water jet. I did not then, nor do I now, think that such a proposal could be successfully carried out if confined to it alone; but I am perfectly satisfied that by a combination of jet and broom, the surface of every town could be kept so thoroughly free from offensive matters as to greatly improve the public health. Is it not in the experience of all Medical Men that the greater number of fever cases they are called to visit are resident in these filthy closes and thoroughfares where the inhabitants are closely packed together, and into which the rays of the sun seldom penetrate—where a continual haze is to be seen, indicative of damp and filth? These pest places, in which fever originates and from which it spreads to other more healthy localities are the spots where the jet and not the broom can have any effect in the matter of cleanliness. The scavenger's broom, in places such as I have described, when oftentimes 150 or 200 human beings are crowded together—not to mention the large percentage of cats and dogs, by partial removal only makes matters worse. Nothing but the jet can make the desired improvement in such places; and improvement it really does make, as evidenced after the operations, by the paving stones appearing as clean as on the day they were first laid down. Nor are the good effects of washing our closes and narrow streets confined to the mere cleaning off the surface; for the filth having been washed away, the exhalations which formerly arose from it do not thereafter enter the houses, and consequently, the air is much purer, and if purer, an improved state of the public health must be the result. I may mention that since the last visitation of Cholera in Perth, viz. in 1866, the washing of closes and streets by means of the jet have been one of the sanitary arrangements of the Local Authority there for the prevention of infectious diseases; and, although I will not trouble you with statistics in favour of the practice, I do not hesitate to say that it has greatly aided in improving the public health in that town."

74. It is the foul condition of the water-tables, and the collections of pools of muddy, stagnant water in the streets and lanes that constantly meet the gaze of the inhabitants, and which lead them to conclude that sanitary operations are not properly conducted—therefore, I trust that the Board will consider the prac-

ticability of carrying out the above method of cleansing the streets, and if regarded as impracticable, that they will direct any other that may seem more feasible, in order that the thoroughfares may be made to assume a different aspect to what they have hitherto done.

75. I may state with reference to the Water Works, that whilst they are in progress, and water in such large quantity is being supplied the City, exerting as it does a greater degree of pressure than formerly, a considerable number of pipes in the streets and lanes as well as in yards have, from time to time burst, and the water running therefrom, together with that from leakage caused through some imperfection of the cocks, has tended to add to the large quantity flowing from baths, so that the evil, upon which I have dwelt has acquired increased proportions. I regard such irregularities, however, as only temporary, as no doubt, under regulations, yet to be made, and proper supervision, they will be corrected. I apprehend that measures will be taken by the Commissioners to prevent the wanton waste of water by householders, and such an unnecessary flow of it from the pipes into the streets. It consists, with my knowledge that, in some instances, the cocks have been left open, and water allowed to run into the streets throughout the night.

76. The officers of the Board have, for the last few months, been compelled, on sanitary grounds, frequently to report these broken pipes and imperfect cocks at the office of the Water-Works, and they continue to do so almost daily. Under an organized system, this duty will, I presume, devolve specially upon an officer of the Water-Works. The prompt repairing of such injuries is necessary, to obviate complaints being made and repeated, of large quantities of water flooding the streets and lanes.

77. With regard to the quality of the water supplied for drinking and other domestic purposes, I have nothing to add to the remarks I made in my last Report. I have no knowledge of what progress is being made with the works, but it is very desirable that a filtering-bed should be early constructed, in order that the water supplied might be clear and free of impurities.

78. In the month of June, I was induced to address a letter to the Board on the subject of the quality of the water that was being supplied, about which complaints had been made. About that period, there were repeated falls of showers in the mountains, and how far these were concerned in determining a greater amount of turbidity of the water, which commonly results from such causes, I am unprepared to state. Since I addressed the

Board, I have heard no more complaints, in regard to the impurity or unwholesomeness of the water.

79. With a view to abate various nuisances prejudicial to health, the Inspectors of Nuisances, under provisions of the Sanitary Laws, have served during the year on householders, and on the owners or agents of premises, 866 written notices and 555 written orders, directing their abatement. In some cases, they have been necessitated to take out proceedings in the Police Court against certain parties, and the Return annexed, marked C, shews the number proceeded against. Notwithstanding the large number upon whom notices and orders were served, the proportion summoned to appear before the Police Magistrate is comparatively small, shewing an increased disposition among householders to comply with the requirements of the Sanitary Laws. I entertain a hope that, by degrees, the masses of the people will understand more clearly, the meaning and object of those Laws, and that, becoming more and more convinced of the importance of cleanliness, as essential to the maintenance of the health of their families, they will see the necessity of observing and carrying out, within their own circles and about their dwellings, what may be regarded as a system of domestic sanitation.

80. Whilst there is a class of nuisances, which it is in my power to have abated, there are others with which I am unable to grapple, and the most formidable of these is, what may be termed, the Carbonic Acid Gas nuisance at the General Penitentiary, situated at the Eastern part of the City, to which I have in former reports made reference. The suffocating and deleterious gases, arising from the Lime and Brick Kilns at that place, are a source of danger to the public health, and it is not improbable that many persons who may have been more immediately exposed to their influence have, by a process of chronic poisoning, become the subjects of serious physical ailments—it may be, of actual organic disease. There can be no difference of opinion as to the propriety of Lime and Brick Kilns, like Slaughter Houses, Cemeteries, Gas-works, and certain other manufactories being established to leeward of the City, so that, from the direction of the prevailing wind, contamination of the air may be avoided.

81. It may be a matter of difficulty to change the site of these Kilns, but it is nevertheless my duty to notice them, as nuisances injurious to the public health.

82. In the month of June, I represented to the Board that a practice prevailed on board of vessels lying in the harbour of Kingston, of pumping foul bilge water from their holds, causing a horrible effluvium, of which people ashore complained, and

which I considered was likely, through atmospheric contamination, to affect the public health.

83. The Board having considered my communication, it was referred to the Pilotage and Harbour Board, and a committee of this Board was appointed to confer with me, as Commissioner of Health, on the subject. I met the committee on the 24th Aug. when the matter was discussed, and it was made evident that it was one surrounded with difficulties—certainly, much greater than I had imagined. I was requested by the committee “to report on the practicability of using disinfectants, so as to deodorize offensive bilge water.” On this point, I have felt great difficulty in obtaining satisfactory information, but have ascertained one fact, that the effectual disinfection and deodorization of the Bilge from day to day, would be so very costly, as to be an insurmountable obstacle to the effectual carrying out of the process. I shall, however, continue to prosecute the enquiry, and hope, eventually, to arrive at a solution of the difficulty.

84. Since I addressed the Board on the subject, no more complaints have been made, but in consequence of my movements on board vessels in the Harbour, and as a result thereof, the bilge water nuisance having been publicly discussed, I have reason to believe that disinfectants and deodorants have been more freely used by Captains of such vessels.

85. With reference to the state of the public health during the year, I have to observe that, with the exception of a few cases of Small-pox that occurred between the months of January and July, it has been on the whole satisfactory, no diseases having prevailed epidemically, nor any complained of, beyond those of the usual, ordinary character. There were no marked meteorological or electrical conditions, to give rise to any particular diseases. During the month of May, there were some heavy rains, but not followed by any remarkable amount of sickness, although a few cases of Dysentery and Diarrhoea occurred in some parts of the City. In the month of October, there was an absence of the usual heavy rains, generally looked for at that period of the year, which are usually succeeded, through telluric and atmospheric influences, by much fever among the inhabitants, of a Bilious remittent character, as in the year 1873, when it prevailed almost epidemically. This year, they were almost completely exempted from this form of fever. During the present and past month, (November) a few scattered cases of Typhoid or Enteric fever have occurred, but of no severity or malignancy, and as far as I have been able to ascertain, there were among them only few deaths. I am not aware that there have been any cases of yellow fever

during the year. The shipping has, I believe been free of any cases of the disease, but there being no public records to guide me, I cannot venture to say that none have been received from that source at the Public Hospital.

86. With regard to infantile diseases and infantile mortality, no satisfactory information can be given about them, in consequence of there being no registration of sickness, nor any of births and deaths. The death-rate among children has always been high in Kingston, and I fear it will continue to be so, so long as the habitations of the poorer classes are ill-constructed, overcrowded, badly ventilated, and there is not a due observance of cleanliness; in fact, so long as there is no regard for the laws of hygiene. Among this class, through the poverty of parents, children are badly fed and scantily clothed, whilst, in sickness, they are slow to obtain medical aid, even if afforded gratuitously, all these circumstances contributing to a high death-rate. Through Legislation alone, may such evils be averted.

87. I have no means of obtaining such statistical information, as would enable me to report with official accuracy upon the actual condition of the public health. There is no Registration of Births and Deaths, the necessity for which I have shewn in former Reports. Until a Law be passed, placing it in my power to obtain necessary statistical information in regard to births and deaths among the population, and to know from time to time, the nature and amount of any prevailing sickness, as well as the localities where it prevails, it will be impossible for me to prepare such a Report on the state of the public health, as it is desirable the Board should have.

88. In a Report of the Committee on the Registration of Diseases, passed at a meeting of the British Medical Association in London in 1874, I find the following passage, bearing on this subject, "The urgent need of such a registration of sickness is absolutely proved by reference to most of the reports of the numerous Medical Officers of Health appointed under the Public Health Act of 1872. Many of these Officers complain "of the want of early information of the outbreak of infectious or epidemic diseases" in their districts; and that there are "no records of disease at their disposal;" no contributors to supply them carefully and promptly with statistics of sickness and mortality, or to announce the presence of epidemic disease."

89. Of such high importance are these matters considered, that a memorial has been presented to the President of the Local Government Board, praying for the establishment of a "National

System of Registration of Disease," and a petition to the same effect has been laid before the House of Commons.

90. For the reasons previously stated, I am unable to shew the death-rate of the population during the year. Upon this point, I have felt that my Reports, from year to year, have been strikingly but unavoidably defective. There has, however, been a comparatively small amount of sickness, and therefore fewer deaths—beyond doubt, considerably less than in 1874, when an epidemic of Small-pox and measles prevailed, and the deaths were numerous. But speculations upon such an important question should be avoided, and carefully recorded statistical facts depended upon—from these alone, should deductions as to the rate of mortality be drawn. I adhere to the views I expressed, when I wrote my last Report, that in calculating the death-rate of the population, it is not only useless but positively dangerous to arrive at conclusions from figures, otherwise obtained than from a careful Registration of Births and Deaths, and of prevailing diseases, as well as from a correct census of the population.

91. If the opinion of many persons, eminently qualified to judge, be correct, that the census Return of the population of Kingston in June 1871 shewed a number below the actual population, and if it be a fact that from that period, there has been a great influx of persons into the City, adding to the fixed population, it is clear that 34,314, shewn by the Return in 1871, is considerably below what is now the number of the inhabitants. If this be the case, then in the calculation of the death-rate of the population, to adopt those figures would be to lead to false conclusions. An eminent Statistician has remarked, "It is almost needless to repeat that any error, proved or probable in the Census, either of number or of ages, casts a dark shadow of doubt upon the published death-rates."

92. I have shown what must constitute the basis for calculating and ascertaining the actual death-rate of the City, and I have pointed out the obstacles that have prevented me from furnishing such information.

93. When the design of any one is "to support some favoured theory or maintain some foregone conclusion," and the question of the high death-rate of the population of a City, as dependent upon an alleged neglect of sanitary measures is the hobby, it is not unusual for Amateur Sanitarians to collect a mass of figures, and attempt to work out ingeniously such theory and conclusion. But the subject is one of much importance and should be dealt with cautiously, and with the most scrupulous regard for truth; and various matters in connexion with the

population, which it is unnecessary I should set out here in detail, should be weighed and well considered. Evidence would thus be afforded to prove demonstratively that, notwithstanding figures may shew a high general death-rate, it is not, even when calculated from the most reliable statistics, always to be attributed to the insanitary condition of a Town or District.

94. Upon this subject, Doctor Rumsey, a great authority on sanitary questions, in a work recently published, makes the following remarks, which I may be pardoned for introducing here, "The mere proportion of deaths to population in some town or building, within a brief period, is again and again put forward as a proof of the favourable or unfavourable condition of health in that place, without reference to the ages, habits and employments of its inhabitants, without distinguishing residents from casual immigrants, regardless of vicissitudes of climate and seasons, calamitous events, or other modifying circumstances. Locality and structural reforms are extolled or condemned on evidence which would scarcely satisfy even a Coroner's Jury. Such a misuse of vital statistics almost justifies the opponents of the science in their trite remark that, "you may prove anything by figures."

"The real sanitary condition of a population, that is, its average state of health, is most correctly determined by summing up the period during which persons of every age and sort suffer from disease, injury or infirmity, so as to incapacitate them in youth and middle age, for the ordinary business and functions of life, or to make them, in childhood and old age, subjects for constant care and nursing."

"Present antecedents and remote causes of deaths now generally escape notice. The deaths of those who merely enter a district to die there belong rightfully to another locality; and vast numbers succumb in our large towns, in seaports, in public establishments, hospitals, asylums, workhouses, and prisons, whose diseases were not acquired in the places where they died, and who can scarcely be said to have lived there. The mere death-rate therefore without the life-rate of the inhabitants, may and does lead to most fallacious conclusions as to local unhealthiness. Moreover, where the ages of a population are examined, the crude and hasty deductions from a general death-rate are often reversed."

95. Many other valuable remarks on vital and sanitary statistics, some of the fallacies of which it is the object of the author to shew, abound in Doctor Rumsey's work. In quoting from so high an authority, I am actuated altogether by a desire to satisfy

the Board, who have no doubt thought over, but should not be misled on the question, that the healthiness or unhealthiness of Kingston is not to be determined by unfair and crude calculations of death-rates, not based upon a correct numerical statement of the population and a legal registration of deaths, nor with a due regard to any recorded facts, explanatory of the circumstances under which the several deaths occurred.

96. That improvement has taken place, during the last few years in the sanitary condition of the city and parish of Kingston, is indisputable, notwithstanding as shewn in this Report, particularly with regard to its drainage, much remains yet to be done in furtherance of such an object.

97. The operations that have been going on uninterruptedly from year to year since 1873, when Law 6 of 1867 came into active operation, and officers were appointed, could determine no other result than unquestionable sanitary progress. It is quite true that before that time, partial measures had been employed in that direction by a former Local Board of Health, and for a short period by the present Board. But reference to my interim Report of date 25th August 1873, describing the state of the city, will shew that its sanitary defects were such (and they could not have been otherwise, after so many years of neglect) as to demand an exercise of the greatest possible amount of energy on the part of those, who had just been appointed to direct and carry out the work of sanitary reform. Through past neglect and indifference about Sanitation, the City abounded in filth of every description, and the masses of the people seemed as yet to have no real conception of the meaning and object of Sanitary Laws and Regulations. This alone constituted a difficulty, to surmount which, much perseverance and the exercise of a sound judgment on the part of the officers were required. It was found impossible, at first, to bring the people to a due knowledge of the requirements of the Sanitary law, and to convince them of the advantages to health, to be derived from the carrying out of sanitary measures. Through steady perseverance, however, they have become better informed on the subject, and it is pleasing to remark that a large number of them have shewn not less desire to see those measures carried out, than has been evinced by many of the more intelligent members of the community. The complaints and representations made, from time to time, by some among the humbler classes, shew that they are becoming enlightened as to what is meant by public nuisances, injurious to health, and in many instances, have shewn a willingness and anxiety to have them abated. Even among many of the very

poor, who live in wretched habitations, with conditions about them that tend to generate and foster disease, it will be seen that efforts are made at securing cleanliness. Much of this improvement has taken place from the house-to-house visitation system, carried on by the Inspectors of Nuisances.

98. I must not omit to make some remarks on over-crowding in the dwellings of the poor, as it is one of the most marked evils in connection with this class of persons—it is not only productive of disease, but is a source of danger, morally and socially, to those inhabiting them. Men, women, and children are huddled together in a small apartment, with windows fastened, the air impure and no ventilation whatever, a condition of things calculated to bring about, with certainty, their moral and physical deterioration. Inspections of such tenements reveal the fact of over-crowding, and its great danger to health is apparent, but there is no law in existence for its prohibition, and therefore the officers of the Board are powerless to act.

99. In England, dwellings in towns or cities, which are old, dilapidated, and unsafe for the health of their occupants, also the evil of over-crowding are declared under certain Laws to be nuisances, which may be dealt with and removed. In my last Report, in consequence of what I had witnessed during the prevalence of an Epidemic of Small-pox, I thought it my duty to bring to the notice of the Board the character of the dwellings of the poor of Kingston, and their too frequently over-crowded state, and I then remarked, “I cannot avoid observing that the question of the dwellings of the poor, and the habit of over-crowding (the improvement of the former, and a prohibition of the latter being necessary for the safety of the population) is one that, in due course, should engage the attention of the Board, if not that of the Government.”

100. Such wretched habitations and over-crowding are destructive of the population, morally and physically; and as by their removal and prevention, health may be enjoyed and life be prolonged or saved, and other evils mitigated; a knowledge of these facts may lead the government to view the matter seriously, as one demanding their attention and consideration.

101. I have dwelt upon all the subjects, which I consider should be embraced in my Annual Report to the Board, and however imperfectly I may have dealt with them, or to what extent some of the views I have expressed may be considered erroneous, or any of my suggestions be deemed unimportant, I can only state that they have been arrived at, and are given after due thought and reflection.

102. It being my duty, as Commissioner of Health, to enlighten the Board upon all matters bearing upon, and influencing the public health, as well as to advise thereon, those views and suggestions are respectfully submitted to the Board, in order that whilst the good results of active Sanitary operations are set forth,

I have the honor to be,

Sir,

Your Obedient Servant,

JAMES SCOTT,

Commissioner of Health.

To the Hon. H. J. KEMBLE,
Chairman of the Local Board of Health,
Kingston.



A.—RETURN of PATIENTS Treated in the Kingston Small Pox Hospital from the 1st of January to 31st December, 1875.

No.	Name.	Age.	Date of Admission	Whence Came.	Form of Disease.	Discharged.	Died.	Remarks.
1	Moses Brown	18	Feb. 2	Public Hos- pital	Discrete	...	Feb. 2	* Mother of Jonathan Lynch. + Proved not to be a case of Small- pox. ++ Age not known, but an adult. ditto ditto
2	John Lewis	18	"	"	"	Feb. 13		
3	Jonth. Lynch	3	Feb. 3	St. Dorothy	Confluent	Feb. 19		
4	*Mary Lynch	...	"	"	None	"		
5	Johan. Tulloch	14	Feb. 14	Duke-street	Confluent	March 13		
6	† Wm. Jacobs	18	Feb. 24	Smith's Vil- lage	Observation	March 27		
7	Jane Hamilton	15	March 3	Portland	Modified	March 12		
8	† Jas. Patrick	...	April 3	Hanover-st.	Confluent & hæmorrhagic	...	April 6	
9	† Amelia Ha- milton	...	April 17	39 Luke-lane	Modified	March 3		
10	James Neil	30	June 19	75, George's Lane	Confluent	...	June 23	
11	Edwd. Soares	19	July 23	117, Tower- street	Modific	Aug. 24		

The above Return is copied from the Register kept at the Small-pox Hospital.
JAMES SCOTT, Commissioner of Health.

B.—SUMMARY of WORK, &c., Performed under Law 6 of 1867, from the 1st day of January to the 31st December, 1875, under the special direction and supervision of the Inspectors of Nuisances of the Parish of Kingston.

Month.	Number of Sweepers Employed.	Number of Carts Employed.	Number of Loads Removed by Carts.	Number of Foul Yards Cleaned.	Number of Unenclosed Lots of Land Cleaned.	Number of Cesspools abandoned in Streets and Lanes	Number of Cesspools Cleaned in Streets and Lanes.	Number of Yards Inspected.	Number of Latrines Cleaned.	Number of Carcasses Removed.
1875.										
January.....	160	98	871	..	2	..	..	6	3	166
February.....	183	105	1013	..	1	..	..	..	2	134
March.....	338	183	1763	1	3	..	..	5	3	409
April.....	235	154	1352	12	5	..	2	338	37	297
May.....	145	126	1146	12	9	1	4	375	41	280
June.....	182	138	1161	17	9	3	1	397	84	332
July.....	181	158	1243	18	6	1	..	322	102	337
August.....	181	127	1108	15	3	..	1	263	92	290
September.....	207	139	1336	8	11	2	2	13	36	260
October.....	212	182	1603	10	1	..	2	362	73	400
November.....	192	175	1712	6	7	1	1	155	58	446
December.....	271	175	1733	5	7	..	2	72	27	483
Total.....	2487	1760	16,041	104	64	8	16	2308	558	3834

JAMES SCOTT, Commissioner of Health.

C.—*RETURN shewing the Names of Persons Prosecuted by the Officers of the Local Board of Health of Kingston under Law 6 of 1867, Law 8 of 1874, the Towns and Communities Act, and the Regulations for the Government of the City and Parish of Kingston, from the 1st day of January to the 31st December, 1875.*

Name.	Residence	Offence.	Date of Trial.	Result.
Jonathan Brown	Kingston	Depositing stable manure on a lane in Manchester Square,	Jan. 29	Severe illness of the Inspector of Nuisances prevented him from pressing the charge in Ct.
John Small	"	Depositing stable manure on a lane in Manchester Square,	"	Ditto ditto.
George Lambert	"	Driving Sarah Jones, a person suffering from Small-pox, in a public conveyance and not providing for its disinfection.	Feb. 2	Summons issued but not served, the driver having left the city.
John A. Golden	98, Tower Street	Exposing Sarah Jones, a person suffering from Small-pox, in a public conveyance without proper precautions against spreading the disease.	"	Dismissed—the defendant had no knowledge that the case was one of Small pox, and the driver, under the Harkney Carriages Regulations, was bound to receive her as a passenger.
Wm. Hammond	20, Parade	Spilling night soil on the streets.	Feb. 5	Summons not executed, Hammond having left the city
George Barrett	James' St	Removing stable manure on a dray, and allowing it to drop in the streets.	Feb. 12	Case not heard through, severe illness of the Inspector of Nuisances.
Colin Nairne	124, Barry Street	Not complying with order to clean foul privy on premises.	May 13	Fined 20s.
John Brown	15, Wildman St.	Emptying cesspool in yard.	May 27	Withdrawn — By-Law directing the place of deposit not having been published in the 'Jamaica Gazette.'
Edward Brown	50, Rosemary-In.	Not complying with order to clean foul privy on his premises.	June 14	Not pressed against him, the nuisance having been abated
George Hamilton	42, Tower Street	Not complying with order to clean foul privy on premises.	"	Dismissed — Notice having been improperly served.
Frances Hughes	29, Kingston-lane	Allowing soap water to flow into the street from her premises	"	Admonished and dismissed.
Elizabeth Henry	93 Charles Street	Throwing the offals of a fowl into the street.	"	Fined 10s.
Henry Robinson	68, Pink Lane	Not complying with order to clean foul privy on premises.	July 7	Fined 40s.
George Hamilton	42, Tower Street	Persistently refusing to clean foul privy on his premises.	July 8	Fined £5.

C.—*RETURN (continued) shewing the Names of Persons Prosecuted by the Officers of the Local Board of Health, Kingston, &c.,*

Name.	Residence.	Offence.	Date of Trial.	Result.
Kaufman Levien	67, Orange Street	Not complying with order to clean foul privy on his premises.	July 29	Charge not pressed, defendant having abated the Nuisance.
John Bently	63, Luke Lane	Not complying with order to clean foul privy on premises.	"	Ditto ditto.
Robert Silver	10, Prince of Wales Street, Alman Town	Not complying with order to clean foul privy on premises,	Aug. 21	Fined 40s., but payment not to be enforced, if the Latrine be cleaned within one week.
Robert Silver	19, Regent Street	Not complying with order to clean foul privy on premises.	"	Fined 40s., but payment not to be enforced, if the Latrine be cleaned within one week. (Above cleaned on 28th Aug. and fines remitted).
Edward Green	20, Georges Lane	Not burying night-soil, but throwing it on the surface at the place of deposit.	Sept. 6	Nuisance being abated, case not pressed.
M. Legendre	80, East-st	Not complying with order to clean foul cesspool attached to his premises.	Nov. 23	Withdrawn — Nuisance having been abated.
Agustus Audinet	155, Tower Street	Not complying with order to clean foul privy on premises.	"	Dismissed.
Thomas Knibbs	66, Laws Street	Not complying with order to clean foul privy on premises.	Dec. 20	Withdrawn — nuisance having been abated.
Sol. Herschfield	127, Tower Street	Not complying with order to clean foul privy on premises.	"	Ditto ditto.
George Adams	143, "	Not complying with order to clean foul privy on premises	"	Ditto ditto.
Charlotte Thomas	10, Luke Lane	Allowing foul water to flow from her premises into the lane, (Luke.)	"	Dismissed.
Abigail Depass	37, Orange Street	Allowing foul water to flow from her premises into Luke Lane.	"	Fined 5s.
Akoon Atong	113, Barry Street	Allowing foul water to flow from his premises into Luke Lane.	"	Dismissed, refused to answer to the name he had given previously, and which appeared in the Summons.
Ephraim Athias	88, Orange Street	Allowing foul water to flow from his premises into Orange-street, and obstructing the Inspector of Nuisances in the discharge of his duty.	Dec. 30	Defendant left the Island, and the case was not proceeded with.

